TREK

HOW TO MANUALLY UNINSTALL THE TREK SOFTWARE



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1 Introduction

The correct way to uninstall the TReK software is to use the Windows Control Panel. However, if for some reason this does not work (or does not properly uninstall TReK), it is possible to uninstall the TReK software manually. This white paper provides step-by-step instructions on how to do this.

2 Technical Support

If you are having trouble installing the TReK software or using any of the TReK software applications, please try the following suggestions:

Read the appropriate material in the manual and/or on-line help.

Ensure that you are correctly following all instructions.

Checkout the TReK Web site at http://trek.msfc.nasa.gov/ for Frequently Asked Questions.

If you are still unable to resolve your difficulty, please contact us for technical assistance:

TReK Help Desk E-Mail, Phone & Fax:

E-Mail: trek.help@nasa.gov

Telephone: 256-544-3521 (8:00 a.m. - 4:30 p.m. Central Time)

Fax: 256-544-9353

TReK Help Desk hours are 8:00 a.m. -4:30 p.m. Central Time Monday through Friday. If you call the TReK Help Desk and you get a recording please leave a message and someone will return your call. E-mail is the preferred contact method for help. The e-mail message is automatically forwarded to the TReK developers and helps cut the response time.

3 How to Manually Uninstall the TReK Software – Step-by-Step

When TReK is installed there are four locations on your PC where information is stored: TReK Installation Directory, Windows Registry, Windows System32 directory, and the Documents and Settings area where user specific application data is stored. The following steps provide information on how to remove TReK specific data from each of these locations.

1. Delete the installation directory where the TReK software files were installed.

Note: If you used the default directory when installing TReK, the installation directory will be similar to the following (the folder could be "Telescience Resource Kit" or something like "TReK 3.1.1"):

C:\Program Files\Telescience Resource Kit

Or

C:\Program Files (x86)\Telescience Resource Kit

- 2. Delete TReK files out of the C:\Windows\System32 folder or the C:\Windows\SysWOW64 folder depending on whether it is a 32 or 64 bit computer. There are three TReK files located in this folder that need to be deleted. They are:
 - trek_user_api.dll
 - trek_cmd_user_api.dll
 - trek_tp_user_api.dll
- 3. Delete the TReK entry out of the HKEY_LOCAL_MACHINE area of the Windows registry. There are TReK entries in two locations in the registry: HKEY_LOCAL_MACHINE and HKEY_CURRENT_USER. TReK settings which apply to all users are in the HKEY_LOCAL_MACHINE area.
 - a. Start the Windows registry editor (regedit).

You can start the registry editor program from a Command Prompt window. To start the Command Prompt window, go to Start Menu/Programs/Accessories/Command Prompt. When you get to the Command Prompt window type in "regedit" (without the quotes) and this will start the Registry Editor. You will see a window similar to the one shown in Figure 1 below.

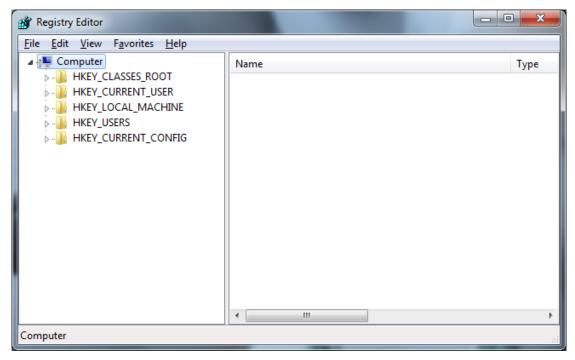


Figure 1 Registry Editor Window

b. In the Registry Editor window open the HKEY_LOCAL_MACHINE folder. Under HKEY_LOCAL_MACHINE keep opening folders using the following path:

HKEY_LOCAL_MACHINE\Software\TReK

Or

HKEY_LOCAL_MACHINE\Software\Wow6432Node\TReK

Once you get to the folder named TReK, select the TReK folder, go to the Edit menu, and select Delete. This will delete the entire folder (called a Key in Registry terminology). If you get a message asking if you want to delete this key and all its subkeys select Yes.

OPTIONAL STEPS

The next two steps (steps 4 & 5) are optional. These two steps deal with deleting user-specific data – settings and files which are stored on your system on a per-user basis (based on username). If you plan to re-install TReK we recommend skipping these steps. However, if you want to completely remove all traces of TReK from your system you will need to perform these steps for each user account on your system.

4. Delete the TReK entry out of the HKEY_CURRENT_USER area of the Windows registry. TReK settings which are user specific are stored in the HKEY_CURRENT_USER area. These settings are user specific based on username. These are settings that you set using application dialogs such as the Set Telemetry Processing Options dialog and the Set Command Processing Options dialog. If you plan to re-install TReK, and you would like to re-use your existing settings, you should skip this step. It's okay to leave these settings in the registry.

If you exited the Registry Editor program please restart it. Go to the top of the registry tree (My Computer as shown in Figure 1) and locate the folder named HKEY_CURRENT_USER. Under HKEY_CURRENT_USER keep opening folders using the following path:

HKEY_CURRENT_USER\Software\TReK

When you get to the folder named TReK, select the TReK folder, go to the Edit menu, and select Delete. This will delete the entire folder (called a Key in Registry terminology). If you get a message asking if you want to delete this key and all its subkeys select Yes.

Remember, this only deletes the settings associated with the username you are currently logged in under. To delete these settings for other usernames you will need to log in under those usernames.

5. This step involves removing a TReK directory that is created to store TReK user specific application data.

Be Careful -- this directory is the default location for user specific databases and configuration files. If you don't make a copy of your user specific data before you delete this directory you will lose your files. If you plan to re-install TReK we recommend that you leave this directory on your system. When TReK is re-installed it will re-use this directory (your files will not be overwritten or deleted).

The default location of this directory on a Windows XP system is:

C:\Documents and Settings\<username>\Application Data\TReK

For Windows 7 or 8 the default location is:

C:\Users\<username>\AppData\Roaming\TReK

Once you've located this TReK directory, consider making a backup copy of your user specific files and then delete this directory.

That's it!!! If you completed the steps above you have successfully removed TReK from your system.

Appendix A Glossary

Note: This Glossary is global to all TReK documentation. All entries listed may not be referenced within this document.

Application Programming Interface

(API)

A set of functions used by an application program to provide access to a system's capabilities.

Application Process Identifier (APID)

An 11-bit field in the CCSDS primary packet header that identifies the source-destination pair for ISS packets. The type bit in the primary header tells you whether the APID is a payload or system

source-destination.

Calibration The transformation of a parameter to a desired

physical unit or text state code.

Communications Outage Recorder System that captures and stores payload science,

health and status, and ancillary data during TDRSS

zone of exclusion.

Consultative Committee for Space

Data Systems (CCSDS) format

Data formatted in accordance with

recommendations or standards of the CCSDS.

Consultative Committee for Space

Data Systems (CCSDS) packet

A source packet comprised of a 6-octet CCSDS defined primary header followed by an optional secondary header and source data, which together

may not exceed 65535 octets.

Conversion Transformation of downlinked spacecraft data

types to ground system platform data types.

Custom Data Packet A packet containing a subset of parameters that

can be selected by the user at the time of request.

Cyclic Display Update Mode A continuous update of parameters for a particular

display.

Decommutation (Decom) Extraction of a parameter from telemetry.

Discrete Values Telemetry values that have states (e.g., on or off).

Dump During periods when communications with the

spacecraft are unavailable, data is recorded onboard and played back during the next period when communications resume. This data, as it is being recorded onboard, is encoded with an onboard embedded time and is referred to as dump

data.

Enhanced HOSC System (EHS) Upgraded support capabilities of the HOSC

systems to provide multi-functional support for multiple projects. It incorporates all systems required to perform data acquisition and distribution, telemetry processing, command services, database services, mission support services, and system monitor and control services.

Exception Monitoring A background process capable of continuously

monitoring selected parameters for Limit or Expected State violations. Violation notification is

provided through a text message.

Expected State Sensing Process of detecting a text state code generator in

an off-nominal state.

EXPRESS An EXPRESS Rack is a standardized payload rack

system that transports, stores and supports experiments aboard the International Space Station. EXPRESS stands for EXpedite the PRocessing of Experiments to the Space Station.

File transfer protocol (ftp)

Protocol to deliver file-structured information from

one host to another.

Flight ancillary data

A set of selected core system data and payload

health and status data collected by the USOS Payload MDM, used by experimenters to interpret

payload experiment results.

Grayed out Refers to a menu item that has been made

insensitive, which is visually shown by making the menu text gray rather than black. Items that are

grayed out are not currently available.

Greenwich Mean Time (GMT)

The solar time for the meridian passing through

Greenwich, England. It is used as a basis for calculating time throughout most of the world.

Ground ancillary data

A set of selected core system data and payload

health and status data collected by the POIC, which is used by experimenters to interpret payload experiment results. Ground Ancillary Data can also contain computed parameters

(pseudos).

Ground receipt time Time of packet origination. The time from the

IRIG-B time signal received.

Ground Support Equipment (GSE) GSE refers to equipment that is brought in by the

user (i.e. equipment that is not provided by the

POIC).

Ground Support Equipment Packet A CCSDS Packet that contains data extracted from

any of the data processed by the Supporting Facility and the format of the packet is defined in the Supporting Facility's telemetry database.

Huntsville Operations Support

Center (HOSC)

A facility located at the Marshall Space Flight Center (MSFC) that provides scientists and engineers the tools necessary for monitoring, commanding, and controlling various elements of space vehicle, payload, and science experiments. Support consists of real-time operations planning and analysis, inter- and intra-center ground operations coordination, facility and data system resource planning and scheduling, data systems monitor and control operations, and data flow

coordination.

IMAQ ASCII A packet type that was added to TReK to support a

very specific application related to NASA's Return to Flight activities. It is not applicable to ISS. It is used to interface with an infrared camera that

communicates via ASCII data.

Limit Sensing Process of detecting caution and warning

conditions for a parameter with a numerical value.

Line Outage Recorder Playback A capability provided by White Sands Complex

(WSC) to play back tapes generated at WSC during ground system communication outages.

Measurement Stimulus Identifier

(MSID)

Equivalent to a parameter.

Monitoring A parameter value is checked for sensing

violations. A message is generated if the value is

out of limits or out of an expected state.

Parameter TReK uses the generic term parameter to mean any

piece of data within a packet. Sometimes called a measurement or MSID in POIC terminology.

Payload Data Library (PDL)

An application that provides the interface for the

user to specify which capabilities and requirements are needed to command and control his payload.

(PDSS)

The data distribution system for ISS. Able to route

data based upon user to any of a number of

destinations.

Payload Health and Status Data Information originating at a payload that reveals

the payload's operational condition, resource usage, and its safety/anomaly conditions that could result in damage to the payload, its environment or

the crew.

Payload Operations Integration

Payload Data Services Systems

Center (POIC)

Manages the execution of on-orbit ISS payloads

and payload support systems in

coordination/unison with distributed International Partner Payload Control Centers, Telescience Support Centers (TSC's) and payload-unique

remote facilities.

Payload Rack Checkout Unit

(PRCU)

The Payload Rack Checkout Unit is used to verify payload to International Space Station interfaces

for U.S. Payloads.

Playback Data retrieved from some recording medium and

transmitted to one or more users.

Pseudo Telemetry (pseudo data) Values that are created from calculations instead of

directly transported telemetry data. This pseudo data can be created from computations or scripts

and can be displayed on the local PC.

Remotely Generated Command A command sent by a remote user whose content

is in a raw bit pattern format. The commands differ from predefined or modifiable commands in that the content is not stored in the POIC Project

Command Database (PCDB).

Science data Sensor or computational data generated by

payloads for the purpose of conducting scientific

experiments.

Subset A collection of parameters from the total

parameter set that is bounded as an integer number of octets but does not constitute the packet itself.

A mini-packet.

Super sampled A parameter is super sampled if it occurs more

than once in a packet.

Swap Type A flag in the Parameter Table of the TReK

database that indicates if the specified datatype is byte swapped (B), word swapped (W), byte and word swapped (X), byte reversal (R), word

reversal (V) or has no swapping (N).

Switching A parameter's value can be used to switch between

different calibration and sensing sets. There are two types of switching on TReK: range and state

code.

Transmission Control Protocol

(TCP)

TCP is a connection-oriented protocol that

guarantees delivery of data.

Transmission Control Protocol

(TCP) Client

A TCP Client initiates the TCP connection to

connect to the other party.

Transmission Control Protocol

(TCP) Server

A TCP Server waits for (and accepts connections

from) the other party.

Telemetry Transmission of data collected form a source in

space to a ground support facility. Telemetry is

downlink only.

Telescience Support Center (TSC) A TSC is a NASA funded facility that provides the

capability to plan and operate on-orbit facility class payloads and experiments, other payloads

and experiments, and instruments.

User Application Any end-user developed software program that

uses the TReK Application Programming Interface software. Used synonymously with User Product.

User Data Summary Message

(UDSM)

Packet type sent by PDSS that contains

information on the number of packets sent during a given time frame for a PDSS Payload packet. For details on UDSM packets, see the POIC to Generic

User IDD (SSP-50305).

Uplink format The bit pattern of the command or file uplinked.

User Datagram Protocol (UDP) UDP is a connection-less oriented protocol that

protocol suite, the UDP provides the primary mechanism that application programs use to send datagrams to other application programs. In addition to the data sent, each UDP message contains both a destination port number and a fully qualified source and destination addresses making

does not guarantee delivery of data. In the TCP/IP

it possible for the UDP software on the destination to deliver the message to the correct recipient process and for the recipient process to send a

reply.

User Product Any end-user developed software program that

uses the TReK Application Programming Interface

software. Used synonymously with User

Application.

Web Term used to indicate access via HTTP protocol;

also referred to as the World Wide Web (WWW).

Appendix B Acronyms

Note: This acronym list is global to all TReK documentation. Some acronyms listed may not be referenced within this document.

AOS Acquisition of Signal

API Application Programming Interface
APID Application Process Identifier

ASCII American Standard Code for Information Interchange

CAR Command Acceptance Response
CAR1 First Command Acceptance Response
CAR2 Second Command Acceptance Response

CCSDS Consultative Committee for Space Data Systems

CDB Command Database CDP Custom Data Packet

COR Communication Outage Recorder

COTS Commercial-off-the-shelf
CRR Command Reaction Response

DSM Data Storage Manager

EHS Enhanced Huntsville Operations Support Center (HOSC)

ERIS EHS Remote Interface System

ERR EHS Receipt Response

EXPRESS Expediting the Process of Experiments to the Space Station

ES Expected State

FAQ Frequently Asked Question

FDP Functionally Distributed Processor

FSV Flight System Verifier FSV1 First Flight System Verifier Second Flight System Verifier FSV2 **FPD** Flight Projects Directorate FTP File Transfer Protocol Greenwich Mean Time **GMT GRT Ground Receipt Time Ground Support Equipment GSE**

HOSC Huntsville Operations Support Center

ICD Interface Control Document IMAQ ASCII Image Acquisition ASCII

IP Internet Protocol

ISS International Space Station

LDP Logical Data Path
LES Limit/Expected State
LOR Line Outage Recorder

LOS Loss of Signal

MCC-H Mission Control Center – Houston

MOP Mission, Operational Support Mode, and Project

MSFC Marshall Space Flight Center

MSID Measurement Stimulus Identifier

NASA National Aeronautics and Space Administration

OCDB Operational Command Database

OS Operating System

PC Personal Computer, also Polynomial Coefficient

PCDB POIC Project Command Database

PDL Payload Data Library

PDSS Payload Data Services System

PGUIDD POIC to Generic User Interface Definition Document

POIC Payload Operations Integration Center

PP Point Pair

PRCU Payload Rack Checkout Unit

PSIV Payload Software Integration and Verification RPSM Retrieval Processing Summary Message

SC State Code

SCS Suitcase Simulator SSP Space Station Program

Space Station Control Center **SSCC** SSPF Space Station Processing Facility TCP Transmission Control Protocol **TReK** Telescience Resource Kit TRR TReK Receipt Response Telescience Support Center **TSC** User Datagram Protocol **UDP** User Data Summary Message **UDSM Uniform Resource Locator URL USOS** United States On-Orbit Segment

VCDU Virtual Channel Data Unit VCR Video Cassette Recorder VPN Virtual Private Network